AN INTERESTING UNPUBLISHED WORK ON FUNGI*

By J. C. ARTHUR

It is not often that a work in systematic botany remains a hundred years without being given to the public in some form of the printer's art, if possessed of genuine merit. Yet this has been the fate of Hedwig's "Descriptio et Adumbratio Microscopico-analytica Fungorum." Every student of plant-rusts has noticed that many species of Uredinales first published in de Candolle's edition of the Flore Française, issued in 1805, with a supplementary volume in 1815, are accredited to "Hedw. f.," often with citation of the work and of the particular plate bearing an illustration of the species. Even the genus Gymnosporangium was not evolved by the learned author of the great French flora, but by the obscure "Hedw. f.," and its type species, G. conicum, is illustrated in "Hedw. f. Fung. ined. t. 2." It would seem that this inedited treatise, from which de Candolle secured such rich gleanings, must have been a work of superior value. I had often wondered who the author could have been, and why a work of such evident merit had never been published, and about two years ago having an opportunity to call at the Candollean Library in Geneva, Switzerland, I made inquiry about the matter. I found, as I had correctly surmised, that the manuscript was in the library. Through the kindness of M. Casimir de Candolle, the present owner of the library, I was permitted to examine it. It is well preserved; and I was enamored with the beauty and skill displayed in its preparation. It is a small quarto, with pages of letter-sheet size. There are about fifty pages of text, and thirty-one pages of plates, the latter most exquisitely drawn and colored by the author. The work deals largely with the Uredinales, and is remarkable for the clearness with which the observations are made, and the discrimination which the author shows in presenting the more important characters of the fungi which he describes. The full title page runs as follows:

^{*} Read before the Torrey Botanical Club, January 27, 1904.

Descriptio et adumbratio microscopico-analytica Fungorum

Aliarumque plantarum cryptogamicarum ad eorum familiam pertinentium.

Auctore

D. Romano Adolpho Hedwigio

Professori Botanices in Academia literarum Lipsiensi; multarumque societatum literarum socio.

"This remarkable work has never been published," wrote M. C. de Candolle recently, in reply to an inquiry sent from London, "owing to various circumstances which you will find fully stated in my grandfather's 'Mémoires et Souvenirs,' page 143." From this source part of the facts now to be presented, were taken, although the work is not so explicit as one could wish. Other published facts have been obtained from scattered sources, and for additional information I am indebted to M. Aug. de Candolle.

A strong friendship had sprung up between A. P. de Candolle, the first of that renowned family of botanists, and Adolph Hedwig, who was of about the same age, and at the time was professor of botany at Leipzig, having succeeded his father, the distinguished bryologist. It was in honor of the elder Hedwig that the journal *Hedwigia* was named. Hedwig, the younger, had begun a monograph of the ferns, and in exchange for specimens from the Antilles and elsewhere had sent to de Candolle an authentic set of mosses from the collection that had belonged to his father, which proved of great service in the revision of the Flore Française. An interesting correspondence ensued, carried on in Latin.

In the meantime Hedwig had prepared a work on the parasitic fungi, and as de Candolle says, "with a true talent." He desired to have this published in Paris and intrusted the manuscript to his very warm friend, A. P. de Candolle. It was placed in the hands of Garnery, who was issuing de Candolle's sumptuous work on succulent plants. For some reason Garnery did not take kindly to the new enterprise and delayed its beginning. De

Candolle says in his Mémoires that, not wishing to seem negligent to Hedwig, he asked Garnery to write to the author and state his reasons for the delay. This was promised, but not done. De Candolle became impatient, and threatened to give the publication of the succulent plants to some one else if he did not soon comply. Garnery was piqued at this, but de Candolle remained firm, and the publication of the succulent plants came to an end. Shortly afterward Garnery went into bankruptcy.

With what sanction de Candolle used the most important of Hedwig's deductions in his Flore Française, which appeared in 1805, we are not told. But the failure to secure the publication of this fine piece of work and stripping it of its scientific treasures did not interrupt the friendship, if we may trust the statement in the Mémoires. Shortly afterward, in July, 1806, Hedwig died. The work was subsequently placed in the hands of Guillemin, of Paris, but was never published.

It is a pity that so admirable a piece of scientific work should have met such an untoward fate. Even after a hundred years its publication would be a distinct gain to science.

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SHORTER NOTES

The Juncaceae of the West Indies. — Professor Buchenau contributed to the first volume of Professor Urban's Symbolae Antillanae an account of the Juncaceae hitherto known in the West Indies. He there records three species, *J. dichotomus* Ell., from Jamaica, a widely spread species in the eastern United States, *J. repens* Michx. from Cuba, also a species of the eastern United States, and *J. Guadeloupensis* Buchen. & Urb., a new species from Guadeloupe.

J. aristulatus Michx., another common species of the south-eastern United States, may now be added to this list; it was collected by me in meadows at Sagua la Grande, Cuba, growing along the edges of small pools, September 4, 1903 (Britton & Wilson, No. 286).

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